Water Monitoring Requirements & Proper Sampling Techniques

For Transient Noncommunity Water Systems

IDEM

Office of Water Quality
Drinking Water Branch

IDEM is committed to making Indiana a cleaner, healthier place to live.

The Indiana Department of Environmental Management is dedicated to conserving, protecting, enhancing, restoring and managing Indiana's environment. We strive to promote conservation, pollution prevention, and a healthy and sustainable ecosystem; put regulations into effect that are consistent with the law and public policy; and fairly but vigorously enforce laws and standards.

IDEM's responsibilities include:

- Monitoring and advising water suppliers in Indiana to ensure the delivery of clean, safe drinking water to its citizens and visitors; and
- Ensuring that groundwater used as a source of drinking water meets safe drinking water standards.

This guide is part of our efforts to meet our responsibilities and make environmental requirements accessible and understandable to Indiana water suppliers.

Drinking Water Branch

Office of Water Quality
Indiana Department of Environmental Management
2525 N. Shadeland Ave., Indianapolis, IN (office location)
P.O. Box 7148, Indianapolis, IN 46207-7148 (mail address)
(800) 451-6027, press 0 and ask for extension 308-3280, or (317) 308-3280
Fax: (317) 308-3339 or (317) 308-3340
IDEM Online: www.IN.gov/idem

Contents

Monitoring your Water

What are the benefits of proper water monitoring?

- Proper water monitoring ensures that the water your business or organization serves to customers, guests or employees is safe to drink. When you meet safe drinking water standards, you help prevent outbreaks of illness from bacteriological or chemical contaminants such as septic system microbes or agricultural and landscape chemicals.
- Proper water monitoring helps you avoid potential liability costs, loss of business due to shutdowns and negative publicity should someone get sick from drinking contaminated water at your business or organization. The cost for testing is minimal compared to the potential cost to human health and your reputation.

Classifying your System

What is a public water system?

A *public water system* is a system that pipes water for human consumption to at least 15 service connections *[the point(s) at which water is drawn from a main water distribution line]* or regularly serves an average of at least 25 individuals daily at least 60 days out of the year. If you make water available for human consumption or for use at bathroom sinks and you don't obtain that water from a water utility, you most likely have a public water system subject to safe drinking water standards. On the other hand, if your business or organization gets its water from a water utility, you would be considered to be a part of that system and therefore exempt from the regulations outlined in this guide.

Public water systems may be publicly or privately owned or operated. Each system has a Public Water System Identification Number (PWSID) that is used for identification purposes. All system owners and operators should know their PWSID and identify themselves by their PWSID whenever they call or write IDEM about their system. If you don't have a PWSID, it's important to get one!

What type of public water system do I have?

Public water systems are divided by regulation into two categories—**community** and **noncommunity**. This division is based on the type of consumer served and the frequency the consumer uses the water. Detailed descriptions can be found on Page 3.

Knowing your classification is important because monitoring requirements vary with each type of system. If you're in doubt, call the Field Inspection Section of IDEM's Drinking Water Branch at (800) 451-6027, press 0 and ask for extension 308-3308, or (317) 308-3308.

This guide applies to transient noncommunity water systems. This is the type of system you most likely have.

Types of Public Water Systems

Community Water System

Simply put, a community water system serves water to a residential population. By definition, it is a public water system that:

- Serves at least 15 service connections used by year-round residents, and/or
- Regularly serves at least 25 year-round residents.

Community water systems generally serve:

- Communities,
- Condominiums,
- Institutions,
- Apartment buildings,
- Nursing homes,
- Mobile/manufactured home parks, and
- Subdivisions.

Does your system fit this description?

Noncommunity Water System

A noncommunity water system is a public water system that:

- Has at least 15 service connections used by *nonresidents* (travelers or transients), and/or
- Which regularly serves 25 or more nonresident individuals daily for at least 60 days per year.

There are two types of noncommunity water systems.

Transient Noncommunity Water System

A transient noncommunity water system is a public water system that is not a community water system and which serves (daily when open) at least 25 people (travelers or transients) for at least 60 days a year. The people served are not generally the same individuals day in and day out. Examples include:

- Campgrounds,
- Churches,
- Golf courses,
- Highway rest stops,
- Lodges,
- Medical facilities,
- Meeting halls,
- Motels,
- Parks,
- Restaurants,
- Service stations, and
- Small businesses.

Nontransient Noncommunity Water System

A nontransient noncommunity water system is a public water system that is not a community water system and which regularly serves the *same* 25 or more persons at least *six months* per year. Examples include:

- Day care centers,
- Factories,
- Industrial parks,
- Office buildings, and
- Schools.

Does a water system's classification ever change?

Yes, a water system's classification can change if the system expands or decreases in size. For example, a restaurant with 20 full-time employees that is open year round and serves 100 customers per day would be classified as a ***transient noncommunity*** water system. It would receive this classification because it serves at least 25 people (travelers or transients) for at least 60 days a year.

If the above restaurant were to increase its staff to 25 full-time employees, its classification would change to ***nontransient noncommunity***. This change in classification occurs because the restaurant now provides water to the same 25 or more people (i.e., the 25 employees) at least six months per year.

What is a sanitary survey and when is one conducted?

A sanitary survey is when IDEM inspects the water source, facilities, equipment, construction, operation and maintenance of your public water system to evaluate the adequacy of those elements for producing and distributing safe drinking water. IDEM determines whether the existing monitoring frequency is adequate and what measures you need to undertake to improve drinking water quality, if necessary. Sanitary survey requirements are as follows:

1. Noncommunity water systems that do not collect five or more routine samples per month must undergo an initial sanitary survey by June 29, 1999. *Transient noncommunity* water systems fit this category.

2. After the initial sanitary survey, your system must undergo another sanitary survey every five years, or more frequently, as determined by IDEM. However, if your noncommunity water system uses only protected and disinfected groundwater as determined by IDEM, your system must undergo subsequent sanitary surveys at least every *10 years* after the initial survey.

Sanitary surveys also may be conducted during routine or periodic inspections, when a maximum contaminant level is exceeded, if there is a disease outbreak, when you qualify for a waiver of the "Five Samples the Next Month" requirement (see page 9), or at the discretion of the commissioner.

Maximum Contaminant Level

What is a maximum contaminant level?

A maximum contaminant level (MCL) is the maximum concentration of a contaminant allowable in water that is served to your customers, guests and employees.

Contaminants to Monitor

For which contaminants must I monitor?

Businesses and organizations with transient noncommunity water systems are required to monitor:

1. **Total Coliform**
2. **Nitrate**
3. **Nitrite**

Monitoring involves:

- Collecting the water sample (or arranging to have the sample collected),
- Ensuring the results are forwarded to IDEM, and
- Keeping records of test results.

Your laboratory is responsible for analyzing the sample and providing results to you (and IDEM, at your request).

What is total coliform and why must I sample for it?

Total coliform includes all types of coliform microorganisms. The presence of total coliform in water generally indicates surface water contamination. This contamination may be caused by a cracked well casing or some other kind of leak. Water contaminated by total coliform may contain disease-causing organisms that especially can harm infants, small children, the elderly and individuals who are in a weakened condition. When a certified laboratory finds total coliform in a water sample, it will automatically perform an additional test to determine if the water contains fecal coliform. A fecal coliform-positive test result indicates the water may contain sewage and bacteria that potentially can cause enteric diseases. Enteric diseases are intestinal diseases such as salmonellosis, typhoid fever and shigellosis. Generally, these diseases are characterized by vomiting, diarrhea, fever and other symptoms. Typhoid fever, for example, is characterized by red rashes, high fever, bronchitis and intestinal bleeding.

What is nitrate and why must I be concerned?

Nitrate is a chemical used in fertilizers. Low levels of nitrate occur naturally in groundwater, but sometimes high levels of nitrate enter groundwater as a result of runoff or seepage from fertilized agricultural lands, municipal and industrial wastewater, garbage dumps, animal feedlots, septic tanks, urban drainage and decaying plant debris.

High levels of nitrate in drinking water can cause serious illness and even death in infants under six months of age. This illness is commonly known as "blue baby syndrome." It occurs because nitrate converts to nitrite in the body, and nitrite decreases the amount of oxygen the blood can carry. Symptoms include shortness of breath and blueness of the skin. The child's condition can deteriorate rapidly over a period of days. Expert medical advice should be sought immediately if these symptoms occur. In addition, nonspecific symptoms of illness may occur in older children, so a medical exam is advised for them if nitrate-contaminated drinking water is suspected.

Who can I contact for more information?

Contact the U.S. Environmental Protection Agency, the Drinking Water Branch, your local health department or a physician for more information on the health effects of nitrate in drinking water.

Total Coliform

Monitoring Requirements and Sampling Techniques

How frequently must I monitor for total coliform?

If your system uses only groundwater and serves 1,000 or fewer persons a day (daily average over a six month period), you must collect one (1) water sample every calendar quarter (see Table 1) and have it tested. Monitoring is only required during the time periods in which a system is in operation. IDEM encourages you to have your water tested *early* rather than late in the quarter to avoid possible delays. For example, a bottle could break during transit and you would have to recollect and remail the sample. Or, your sample could be delayed during shipment to the laboratory. These delays could cause you to miss the due date for turning in your test results (see page 17).

Table 1

2003	2004	2005
☐ Jan. 1 - Mar. 31	☐ Jan. 1 - Mar. 31	☐ Jan. 1 - Mar. 31
☐ Apr. 1 - June 30	☐ Apr. 1 - June 30	☐ Apr. 1 - June 30
☐ July 1 - Sept. 30	☐ July 1 - Sept. 30	☐ July 1 - Sept. 30
☐ Oct. 1 - Dec. 31	☐ Oct. 1 - Dec. 31	☐ Oct. 1 - Dec. 31
2006	**2007**	**2008**
☐ Jan. 1 - Mar. 31	☐ Jan. 1 - Mar. 31	☐ Jan. 1 - Mar. 31
☐ Apr. 1 - June 30	☐ Apr. 1 - June 30	☐ Apr. 1 - June 30
☐ July 1 - Sept. 30	☐ July 1 - Sept. 30	☐ July 1 - Sept. 30
☐ Oct. 1 - Dec. 31	☐ Oct. 1 - Dec. 31	☐ Oct. 1 - Dec. 31

If your system uses only groundwater and serves more than 1,000 persons a day (daily average over a six month period), you must monitor monthly based on population (see Table 2).

If your system uses SURFACE WATER (i.e., lakes, streams, rivers, wells charged by rain or runoff water, etc.), in total or in part, you must monitor monthly based on population (see Table 2). Also, your system must perform filtration and chlorine disinfection treatment. Monitoring for turbidity and chlorine residual is required on a daily basis.

Table 2

Population	Samples Per Month
1,001 to 2,500	2
2,501 to 3,300	3
3,301 to 4,100	4
4,101 to 4,900	5

Important! Rule 327 IAC 8-2-8.5 requires IDEM to evaluate systems classified with groundwater sources (i.e., wells, infiltration galleries, horizontal collectors) to determine whether their groundwater is under the influence of surface water. If IDEM determines your groundwater is under the influence of surface water, conventional surface water treatment (filtration and disinfection) and monthly coliform monitoring shall be required.

What is the maximum contaminant level for total coliform?

The maximum contaminant level (MCL) for total coliform is based on the presence or absence of total coliform in a sample. For transient noncommunity water systems, the MCL for total coliform is no more than one total coliform-positive sample per month. IDEM recommends, however, that your MCL goal for total coliform be zero.

As an example, if your water tested positive for total coliform, you would be required to take a set of repeat samples to verify the original test result. If any repeat sample tests positive for total coliform, your system would be in violation of the MCL for total coliform. This violation might pose an acute risk to health, and public notification (see page 22) would be required.

Failure to sample during any monitoring period also is a violation that requires public notification.

How does monitoring frequency change if my water tests positive for total coliform?

If your routine sample is total-coliform positive, you must collect a set of four (4) repeat samples within 24 hours of being notified of the positive result. IDEM may extend the 24 hour limit up to 48 hours if a system has a problem beyond its control in collecting the repeat samples within 24 hours.

At least one (1) repeat sample must be collected from:

1. The sampling tap where the original total coliform-positive sample was taken,
2. A tap upstream,
3. A tap downstream of the original sampling site, and
4. A tap from a location within the system to be chosen at your discretion.

If any repeat sample is total coliform-positive, your system has exceeded the maximum contaminant level for total coliform and you are required to issue public notification ***(see page 22).***

If you are unsure of where to sample, contact the Drinking Water Branch at (317) 308-3282.

You must collect five (5) routine samples the month after your repeat sampling. Transient noncommunity water systems that have one or more total coliform-positive samples must collect and have at least five (5) routine samples tested during the next month the system provides water to the public. For example, if a routine sample collected July 10 for the third quarter is total coliform-positive, you must collect four (4) repeat samples within 24 hours of being notified of the positive sample as explained above, and you must also collect five (5) routine samples in August.

Important! The above "Five Samples the Next Month" requirement may be waived by IDEM if your four repeat samples are total coliform-negative. IDEM will evaluate test data, determine if you qualify for a waiver and notify you if one has been granted. If your laboratory usually collects samples for your system and you receive a waiver, notify the laboratory that you received a waiver. This notification will prevent the lab from collecting unnecessary samples at your expense.

How do I properly sample for total coliform?

Proper sampling is essential if you want to get accurate test results. For example, your finger could have bacteria on it that contaminates the sample, or improper transport or storage could cause the sample to test positive if you follow improper sampling procedures. If this result occurs, you'll need to do repeat sampling to prove that the water is indeed safe and the test was a "false positive." You can avoid the hassles and costs of more tests by doing it right the first time and by using a certified lab.

Certified laboratory lists are available from IDEM's Drinking Water Branch. Certified labs provide their own sampling kits (bottles, labels, packing boxes) and instructions for proper sampling. Read your laboratory's instructions carefully and follow them, but also review the total coliform sampling procedures below to be sure you are following IDEM's recommended sampling techniques. Call your lab or the Inspection Section of IDEM's Drinking Water Branch if you have any questions.

BEFORE YOU BEGIN

- Always wash your hands thoroughly before collecting your sample, and don't sneeze or cough while doing your sampling. Handle the containers carefully as they are usually presterilized.

- Be sure you have the sampling kit for *total coliform* sampling, and assemble all the sampling supplies before you begin. Double-checking the type of sampling kit you're using is important because kits and instructions vary according to the type of contaminant for which you're sampling. If cold packs will be used, freeze them prior to sample collection.

- Sampling containers may contain a preservative. **Don't rinse it out, and don't add preservatives** to the sample unless specifically instructed to do so by the laboratory.

- The container also may contain a dechlorinating agent that may appear as a white crystal, a spot of powder or a small drop of water. It's there because standard testing methods require that samples taken from disinfected water supplies be dechlorinated. Do not rinse it out!

Proper Sampling Procedures for Total Coliform

1 Choose the sampling point. Find a commonly used spigot or tap, such as a faucet, petcock (small valve or faucet used to drain or reduce pressure from pipes, radiators and boilers) or small valve that is commonly used and receives reasonable protection. The spigot should be in good repair (no leaks) and it shouldn't have new plumbing that hasn't been disinfected. Try to avoid one that has an aerator, screen or hose at the end. Don't pick a spigot or tap that is subject to fouling by splashing, unusual handling, greasy rags or by drip from leaky packing. Don't use a spigot with leaking or new packing, or one that has a new washer or needs packing.

Important: Never use a fire hydrant, frost proof yard hydrant, stand pipe, mop sink, weephole, drinking fountain or threaded hose bib as a sampling point. If possible, avoid faucets with swivel necks. Be sure to avoid smoking areas.

Note: If you're doing repeat sampling, please note the sampling point requirements on page 9.

2 Clear away any greasy rags and food stuffs from around the spigot. Remove the attachment (aerator, strainer or hose) if there is one. Bleach may be used to disinfect the spigot. Do not try to flame sterilize the spigot. It doesn't do much good and can damage the spigot.

3 Fill out the label, tag, and lab form in waterproof ink. Make sure you provide *all* information requested.

4 Wash hands thoroughly.

5 Turn on the cold water tap from which you'll be collecting the sample and allow it to run full force for at least five minutes to clean away possible debris inside the tap. Monitor the time by a clock or watch—do not guess! Reduce the flow to a steady stream about the size of a pencil (approximately a 1/8-inch diameter flow) and allow it to flow an additional five minutes at this rate. Check for steady flow. Do not change the water flow once you have started sampling. It could dislodge microbial growth.

6 Grasp the sample bottle around the lower half to reduce the chance of finger contamination (Figure 1).

Figure 1

Carefully remove the cap from the bottle (Figure 2). Don't lay the cap down or put it in your pocket! Be careful not to touch

Figure 2

the inside of the sterile bottle or cap with your fingers. Hold the bottle in one hand and the cap in the other. Hold the cap in a horizontal position until you are ready to put it back on the bottle. This will protect the cap from falling dust particles or stray droplets.

DON'T RINSE OUT THE BOTTLE BEFORE COLLECTING THE SAMPLE!

7 Position the bottle under the water flow (Figure 3) and collect the required volume of water (100 ml for total coliform analysis). Fill it to the shoulder or to about 1/4 inch from the top.

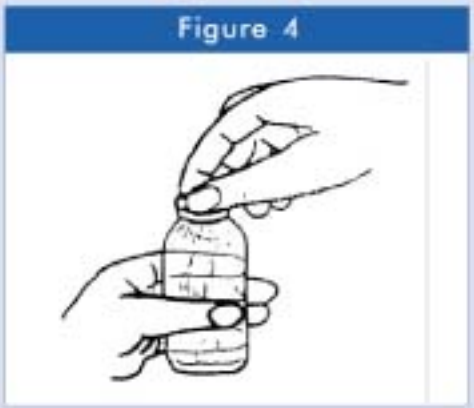
Figure 3

DON'T PERMIT THE FAUCET TO TOUCH THE INSIDE OF THE BOTTLE!

8 Screw the cap on the bottle (Figure 4). Don't touch the inside of the cap and don't over tighten.

9 Turn the tap off. Replace the aerator, strainer or hose if applicable.

Figure 4



10 Check that the information on the label is correct. Also complete any other forms supplied by the testing laboratory with the requested information, such as your PWSID, sample collection location, sampling time and date. A chain-of-custody form which you are required to fill out should be provided by the laboratory. The information on the chain-of-custody form must match the information on the container label.

11 Pack the sample and completed forms as instructed by the laboratory. The temperature of the sample must be kept between 4 to 10° C. If the laboratory is nearby, ice and deliver the sample there directly. If not, pack the sample with the prefrozen chemical cold packs (blue ice) to keep it at the proper temperature. Ship it overnight by U.S. mail or an overnight courier. The samples must reach the laboratory within 30 hours of collection.

Nitrate and Nitrite

Monitoring Requirements & Sampling Techniques

How frequently must I monitor for nitrate?

Transient noncommunity water systems must monitor for nitrate once per year at each entry point to the distribution system. The entry point would be the first place you can draw water after any treatment (e.g., chlorination, water softener), or the tap closest to the well if there is not any treatment. You must monitor for nitrite once at the entrypoint to the distribution system after treatment. The maximum contaminant level (MCL) for nitrite is 1.0 milligram per liter (mg/l). If nitrite result is below 0.5 mg/l, no future nitrite requirements exist.

Monitor Nitrate Once Per Year					
☐ 2003	☐ 2004	☐ 2005	☐ 2006	☐ 2007	☐ 2008

What is the maximum contaminant level for nitrate and what if I exceed it?

The maximum contaminant level (MCL) for nitrate is 10 milligrams per liter (mg/L or parts per million). If the result of any one of your nitrate samples is greater than 10 mg/L, you must collect a confirmation sample within 24 hours of the time you are notified of the result of the initial sampling. If the average of the initial sample and the confirmation sample is greater than 10 mg/L, your system has exceeded the MCL for nitrate. Contact the Drinking Water Branch at (800) 451-6027, press 0 and ask for extension 308-3282, or (317) 308-3282 for assistance with nitrate sampling.

If the average of your initial and confirmation samples is greater than 10 mg/L, continuous public notification is required (as described on page 22). Don't serve the water to children under six months of age, pregnant women and the elderly. **Use only safe water from a known low nitrate source.** Do not boil water in an attempt to reduce the nitrate level. Boiling actually increases nitrate concentration when evaporation occurs.

If the average of your initial and confirmation samples is greater than 20 mg/L, you will need to monitor for nitrate on a quarterly basis in addition to meeting the conditions described above. Your system also must pursue corrective measures to reduce nitrate levels.

How do I properly sample for nitrate and nitrite?

Technical note: The 10 mg/L standard expressed as nitrogen (NO_3 as N) is equivalent to 45 mg/L nitrate expressed as nitrate (NO_3 as NO_3). It's important to know how your water sample result for nitrate analysis is expressed.

Certified laboratories provide their own sampling kits (bottles, labels, packing boxes) and instructions for proper sampling. Call IDEM's Drinking Water Branch for certified laboratory lists. **Read your laboratory's instructions carefully and follow them** but please also review the following proper sampling procedures for nitrate to be sure you are following IDEM's recommended sampling techniques. Call your lab or the Inspection Section of IDEM's Drinking Water Branch if you have any questions.

BEFORE YOU BEGIN

- Always wash your hands thoroughly before collecting your sample. Handle the containers carefully as they are usually presterilized.
- Be sure you have the sampling kit for *nitrate/nitrite* sampling, and assemble all the sampling supplies before you begin. Double-checking the type of sampling kit you're using is important because kits and instructions vary according to the type of contaminant for which you're sampling. If cold packs will be used, freeze them prior to sample collection.
- Sampling containers may contain a preservative. Don't rinse it out, and don't add preservatives to the sample unless specifically instructed to do so by the laboratory.
- The sample bottle may contain acid as a preservative. Take special care in handling the sample bottle. Do not rinse it out!

continued...

Proper Sampling Procedures for Nitrate and Nitrite

1. Locate a sampling point at the entry point to the distribution system. This point would be the first place you can draw water after any treatment (e.g., chlorination, water softener), or the tap closest to the well if there is not any treatment. If applicable, use a commonly used spigot or tap, such as a faucet, petcock (small valve or faucet used to drain or reduce pressure from pipes, radiators and boilers) or small valve that is commonly used and receives reasonable protection. The spigot should be in good repair (no leaks) and it shouldn't have new plumbing that hasn't been disinfected.

2. Fill out the label, tag, and lab form in waterproof ink. Make sure you provide *all* information requested.

3. Wash hands thoroughly.

4. Turn on the cold water tap from which you'll be collecting the sample and allow it to run full force for at least five minutes to clean away possible debris inside the tap. Monitor the time by a clock or watch—do not guess! Reduce the flow to a steady stream about the size of a pencil (approximately a 1/8-inch diameter flow) and allow it to flow an additional five minutes at this rate. Check for steady flow. Do not change the water flow once you have started sampling.

5 Grasp the sample bottle around the lower half to reduce the chance of finger contamination. Carefully remove the cap from the bottle. Don't lay the cap down or put it in your pocket! Be careful not to touch the inside of the sterile bottle or cap with your fingers. Hold the bottle in one hand and the cap in the other. Hold the cap in a horizontal position until you are ready to put it back on the bottle. This will protect the cap from falling dust particles or stray droplets.

DON'T RINSE OUT THE BOTTLE BEFORE COLLECTING THE SAMPLE!

6 Position the bottle under the water flow and collect the required volume of water (50 ml for nitrate analysis). Fill it to the shoulder or to about 1/4 inch from the top.

DON'T PERMIT THE FAUCET TO TOUCH THE INSIDE OF THE BOTTLE!

7 Most laboratories add sulfuric acid to the container in advance—you most likely won't have to do this step. But, if instructed by your laboratory, add sulfuric acid to the non-chlorinated samples to adjust the pH to 2 for preservation. Be sure to take appropriate safety precautions while handling the acid—wear safety goggles and rubber gloves! Sulfuric acid is extremely toxic and corrosive.

8 If instructed to do so by the laboratory, use pH paper or a meter to measure pH.

9 Screw the cap on the bottle. Don't touch the inside of the cap and don't over tighten.

10 Turn the tap off. Replace the aerator, strainer or hose if applicable.

11 Check that the information on the label is correct. Also complete any other forms supplied by the testing laboratory with the requested information, such as your PWSID, sample collection location, sampling time and date. A chain-of-custody form which you are required to fill out should be provided by the laboratory. The information on the chain-of-custody form must match the information on the container label.

12 Pack the sample and completed forms as instructed by the laboratory. The temperature of the sample must be kept between 4 to 10° C. If the laboratory is nearby, ice and deliver the sample there directly. If not, pack the sample with the prefrozen chemical cold packs (blue ice) to keep it at the proper temperature. Ship it overnight by U.S. mail or an overnight courier. The time between sample collection and arrival at the laboratory depends on what test the lab is running, so follow your lab's instructions.

Test Results and Record Keeping

What should I do with my test results?

Copies of all laboratory test results must be received at IDEM on or before the 10th day of the month following the end of each monitoring period. Some laboratories automatically mail sample results to IDEM. Others don't because they have confidentiality policies. We recommend you call your lab to verify whether your lab will be sending your results directly to IDEM. The results can be faxed to (317) 308-3339 or (317) 308-3340. Or, you can mail them to:

IDEM - Office of Water Quality
Drinking Water Branch - Compliance Section
Attn.: Transient Water Systems
P.O. Box 7148
Indianapolis, IN 46207-7148

What are my record keeping responsibilities?

Transient noncommunity water systems must retain the following records on their premises or at a convenient location nearby:

1. Records of total coliform analyses must be kept for at least five years, and records of nitrate analyses must be kept for at least ten years. Actual laboratory reports may be kept or data may be transferred to tabular summaries, provided the following information is included:
    a) Date, place and time of sampling, and the name of the person who collected the sample;
    b) Identification of the sample as to whether it was a routine or repeat sample;
    c) Date on which the analysis was performed;
    d) Laboratory and person responsible for performing the analysis;
    e) Analytical technique/method used; and
    f) Results of the analysis.

2. Records of action taken to correct violations shall be kept for at least three years after the last action taken with respect to the particular violation involved.

3. Copies of any written reports, summaries or communications relating to sanitary surveys of the system conducted by the system itself, by a private consultant or by any local, state or federal agency shall be kept for at least ten years after completion of the sanitary survey involved.

4. Records concerning a variance (per 327 IAC 8-2-25 through 8-2-28) granted to the system shall be kept for at least five years after the expiration of the variance.

A monthly report of operation must be completed by a system and submitted to IDEM if any chemicals (other than softening) are added to the drinking water for treatment. Call IDEM's Drinking Water Branch at (317) 308-3308 for the MRO form.

Troubleshooting Total Coliform

What causes unsatisfactory test results and what can I do to correct the situation?

A total coliform positive result can be caused by any of the following:

1. Contamination of the sample through improper collection procedures;

2. Bacteria contained in water or wastewater is entering the well either:
   - Through a crack in the well casing or a leaking wellhead sanitary seal,
   - Along the outside of the well casing and into the well screen due to improper or inadequate grouting or back filling of the area around the well casing during well construction, or
   - Through the soil to contaminate the groundwater prior to its being drawn into the well screen.

3. A cross connection or back siphonage condition in the plumbing causing bacteria-contaminated water to be drawn into the waterpipe near the sample location.

4. Maintenance of plumbing (e.g., replacing lines, taps) may cause a total coliform positive result. Contact IDEM's Drinking Water Branch at (317) 308-3308 for technical assistance.

The most frequent cause of questionable results is contamination during sample collection.

The most frequent cause of questionable results is contamination during sample collection. Pay particular attention to the instructions for sampling.

If a repeat sample comes back as unsatisfactory, you should consult IDEM's field inspection section for further technical advice.

Disinfection of the well may be recommended. If, after disinfection, another sample comes back as unsatisfactory, the well should be inspected for point of entry contamination. If the well construction is such that surface water can drain or leach into the well along the outside of the well casing at or near the surface of the ground, this is sufficient to provide enough coliform bacteria to produce unsatisfactory results. You may need to consult a well driller or a plumber experienced in well problems to evaluate and possibly restore the integrity of the well. Disinfection of the well also is recommended after any rehabilitation or construction work has been performed.

Shallow dug wells frequently receive unsatisfactory sample analysis. Some of these wells are basically collecting near-surface water which is unlikely to be bacteria-free at all times. If a deeper, cased well is not feasible, it is suggested that bottled water be used for drinking and cooking or that water be hauled from a safe supply. It also is suggested that signs be posted at all faucets so people know not to drink the water.

If there is a suspected source of bacterial contamination near the well, such as a failed septic system, barnyard, cesspool or poorly constructed well, analysis for fecal coliform may help to determine the source. When animal manure may be the cause, a "fecal strep" analysis can distinguish the probable source. Fecal strep-type bacteria tend to be more abundant in animal rather than human waste. If the ratio of fecal coliform to fecal strep is greater than two, the bacteria source is likely to be of human origin. When the ratio is less than two, the bacteria is probably of animal origin. Relocation of either the well or the bacteria source may be necessary to maintain a sanitary well condition after disinfection.

How do I disinfect my water supply well?

The procedures below are recommended for the disinfection of drilled water supply wells.

1 You need two pieces of information to start—the diameter and depth of your well. Then determine the amount of water in the well by using the following formula and Table 1 information.

Formula

(Depth of well in feet)
x
(gallons per foot)
=
(gallons of water in your well)

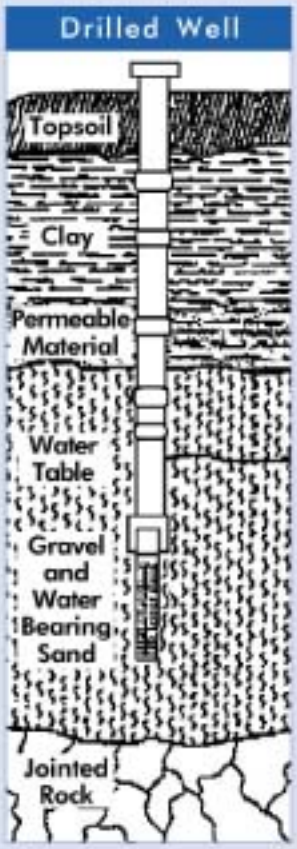
Table 1

Well Diameter (in inches)	Gallons of Water (per foot)
4*	.65
5*	1.00
6	1.50
8	2.60
10	4.10
12	6.00

*Typical home well sizes

2 For each 100 gallons of water in the well, use the amount of chlorine liquid or compound given in Table 2 on page 21. Mix this total amount in about 10 gallons of water. If dry granules or tablets are used, they may be added directly to drilled wells; however, agitation of the water in the casing must be accomplished to ensure a uniform disinfectant residual.

3 Pour this solution into the well making sure the casing walls are wetted before the seal or cap is installed.



4 Connect one or more hoses to faucets on the discharge side of the pressure tank and run them into the top of the well casing. Start the pump, circulating the water back into the well for at least 15 minutes. Then open each faucet in the system until a chlorine smell or taste appears. Close all faucets. Seal or cap the top of the well.

5 Let stand for at least 24 hours, preferably 48 hours.

6 After standing, operate the pump, discharging water from all outlets until all chlorine odor and taste disappears.

continued...

Table 2

Amount of Disinfectant Required for each 100 Gallons of Water for 100 Parts per Million Chlorine Concentration

Laundry Bleach
(5.25% chlorine)

3 cups
1 cup = 8 ounce measuring cup
(2 cups = 1 pint; 4 cups = 1 quart)

Hypochlorite Granules
(70% chlorine)
2 ounces
1 ounce = 1 heaping tablespoon granules
(16 ounces = 1 pound)

Testing After Disinfection of Drilled Wells

It is recommended that a five- to seven-day interval occur before another well water sample is collected for bacterial analysis. Repeated unsatisfactory bacteriological test results may indicate a need for well repair or cross-connect correction. Consult a plumber or well service professional for assistance. (Chlorination units for continuous disinfection of drinking water supplies can be obtained through a water treatment company.) If you have additional questions, contact the Inspection Section of IDEM's Drinking Water Branch or your local health department.

Troubleshooting Nitrate & Nitrite

Nitrate testing is less sensitive than total coliform testing. Nitrate is not a bacteria so improper collection procedures such as putting your finger in the sampling jar or sneezing on the sample do not affect test results. Nevertheless, IDEM encourages you to closely follow the sampling instructions for nitrate on pages 15 and 16.

It is often difficult to pinpoint sources of nitrates because there are so many possibilities. Sources of nitrogen and nitrates may include runoff or seepage from fertilized agricultural lands, municipal and industrial wastewater, garbage dumps, animal feedlots, septic tanks, urban drainage and decaying plant debris. The geologic formations and directions of groundwater flow influence the potential for nitrate contamination from a particular source. The closer the well is to the source of nitrogen or nitrate, the greater the likelihood that elevated levels of nitrate could occur. Shallow (less than 50 feet deep) water wells are more prone to experiencing higher nitrate concentrations. Well construction and the depth of the well casing also are important factors to consider.

Water treatment devices such as reverse osmosis, distillation, ion exchange and deionization have been shown to be effective in reducing nitrate levels in drinking water when properly installed and maintained. Boiling or disinfecting your water will not remove nitrates. Boiling will increase nitrate concentration. Contact IDEM's Drinking Water Branch or a water treatment professional for more information.

Informing your Customers, Guests and Employees

What is public notification and when is it required?

Public notification is the process used by public water systems to notify their customers, guests and employees when the water system has violated a drinking water regulation.

Public notification is required by law when a water system exceeds a maximum contaminant level or fails to monitor. IDEM will inform you when you must issue public notification.

Public notification serves several important purposes:

- To announce violations of regulations and standards,
- To explain the frequency and duration of the problem,
- To warn about potential adverse health effects,
- To direct the public to an alternate water supply, if necessary,
- To inform the public of steps being taken to correct the violation,
- To educate consumers about the possible need for improvements in their public water systems, and
- To foster support to finance any needed improvements in the system.

How do I issue a public notice?

If you exceed the maximum contaminant level for total coliform or nitrate, you must notify persons served by your system (customers, guests and employees) ***no later than twenty-four (24) hours after the violation has been discovered***. You must hand-deliver a notice and/or post a public notice in conspicuous places within the area served by the system. Posting must continue for as long as the violation exists. Notice by hand delivery must be repeated at least every three months for as long as the violation exists.

Standard public notice forms can be found on pages 24 - 31 of this guide.

If you fail to monitor for total coliform or nitrate, you must notify persons served by your system (customers, guests and employees) as outlined above ***within thirty (30) days of missing your monitoring deadline***. In this case, public notification should be posted for two weeks.

You also must mail or fax [(317) 308-3340] a copy of each public notice distributed, published, posted or made available to the persons served by your system to the Compliance Section of IDEM's Drinking Water Branch ***within ten (10) days of delivery and/or posting***.

IDEM - Office of Water Quality
Drinking Water Branch - Compliance Section
Attn.: Transient Water Systems
P.O. Box 7148
Indianapolis, IN 46207-7148

Sample Public Notices

Pages 24-31 contain these sample public notices:

For Total Coliform:

- "Important Information About Your Drinking Water—(*system name*) Has Not Met Water Monitoring Requirements." ..... *pages 24-25*
- "Important Information About Your Drinking Water—(*system name*) Has Exceeded the Maximum Contaminant Level for Total Coliform Bacteria." ..... *pages 26-27*

For Fecal Coliform (E. Coli):

- "Drinking Water Warning—(*system name*) Has Exceeded the Maximum Contaminant Level for Fecal Coliform (E. coli). The water is contaminated with Fecal Coliform (E. coli). Boil Your Water Before Using." ..... *pages 28-29*

For Nitrate:

- "Important Information About Your Drinking Water—(*system name*) Has Not Met Water Monitoring Requirements." ..... *pages 24-25*
- "Drinking Water Warning—(*system name*) Has Exceeded the Maximum Contaminant Level for Nitrate. The Water Has High Levels of Nitrate. Do Not Give the Water to Infants Under Six (6) Months Old. Do Not Use It To Make Infant Formula." ..... *pages 30-31*

You may either photocopy the sample provided and fill in the requested information, or you may draft your own public notification for your system. If you draft your own public notification, be sure to include the minimum required language presented in the sample. You are encouraged to include in your public notification any additional information regarding the circumstances of the violation and any corrective measures undertaken.

Detailed instructions on how to issue the public notice are included on the reverse side of each sample public notice.

IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

(system name)

HAS NOT MET WATER MONITORING REQUIREMENTS.

Our water system recently violated a drinking water standard. Although this is not an emergency, as our customers, you have a right to know what happened, what you should do, and what we are doing to correct this situation.

We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not our drinking water standards meet the U.S. Environmental Protection Agency's health standards.

During _____ (time period) we (**did not monitor** or **did not complete all testing**) for _____ (contaminant) and therefore cannot be sure of the quality of our drinking water at that time.

What should I do?
There is nothing you need to do at this time.

What does this mean?
This is not an immediate risk. If it had been, you would have been notified immediately.

What happened? What is being done? *(Explain below)*

We anticipate resolving the problem within _____ (estimated time frame).

For more information, please contact _____ (name of contact) at _____ (phone number) or _____ (mailing address).

Please share this information with all other people drinking this water, especially those who may not have received this notice directly (e.g., people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

This notice is being sent you by _____ (system name)

Public Water Supply ID# _____ Date Distributed _____

Instructions for Issuance of Public Notice

These instructions apply to the public notice on page 24 of this guide titled "IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER—(*system name*) HAS NOT MET WATER MONITORING REQUIREMENTS." This public notice should be used when you have not met monitoring requirements for **total coliform** or **nitrate.**

1. **Complete and issue the public notice** on the reverse side of this page ***within thirty (30) days of discovery of the violation*** by:
   a) ***Posting*** it in conspicuous places within the area served by the system, or
   b) ***Hand delivering*** it to all regular customers of the water system (i.e., employees, students, staff, etc.).

2. **Posting or hand delivery must be continued for whichever is longer:**
   a) Two (2) weeks if a sample has been collected, or
   b) Until a sample has been collected.

3. **A copy of this public notification as posted or hand delivered and a copy of the completed Certification Form for Public Notice (below) must be mailed within ten (10) days of posting or hand delivery to:** IDEM - Office of Water Quality, Drinking Water Branch - Compliance Section, Attn.: Transient Water Systems, P.O. Box 7148, Indianapolis, IN 46207-7148. Or, you may fax it to (317) 308-3339 or (317) 308-3340.

Note: *If your system chooses to draft its own public notification, the minimum required language is presented on the reverse side of this page. You are encouraged to include in your public notification any additional information regarding the circumstances of the violation and any corrective measures undertaken.*

Certification Form for Public Notice

Public Water System Name: _____

Public Water System Identification Number: _____

For Violation: _____
(describe violation or situation)

Occurring on: _____
(date)

The public water system indicated above hereby affirms that public notice has been provided to consumers in accordance with the delivery, content, and format requirements and deadlines in 327 IAC 8-2.1-7.

- Consultation with primacy agency (if required) on _____ (date).
- Notice distributed by _____ (method) on _____ (date).
- Notice distributed by (if needed) _____ (method) on _____ (date).
- Content – required elements.

_____ _____

Signature of owner or operator Date

IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

_____
(system name)

HAS EXCEEDED THE MAXIMUM CONTAMINANT LEVEL FOR TOTAL COLIFORM BACTERIA.

Our water system recently violated a drinking water standard. Although this is not an emergency, as our customers, you have a right to know what happened, what you should do, and what we are doing to correct this situation.

We routinely monitor for the presence of drinking water contaminants. We took _____ (number) samples for coliform bacteria during _____ (time period). _____ (number/percentage) of those samples showed the presence of coliform bacteria. The standard is no more than _____ (number/percentage) may do so.

What should I do?

- **You do not need to boil your water or take other corrective actions.** However, if you have specific health concerns, consult you doctor.
- People with severely compromised immune systems, infants, and some elderly may be at increased risk. These people should seek advice about drinking water from their health care providers. General guidelines on ways to lessen the risk of infection by microbes are available from the U.S. Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.

What does this mean?

This is not an emergency. If it had been, you would have been notified immediately. Total coliform bacteria are generally not harmful themselves. Coliforms are bacteria which are naturally present in the environment and are used as an indicator that other, potentially harmful, bacteria may be present. Coliforms were found in more samples than allowed and this was a warning of potential problems.

Usually, coliforms are a sign that there could be a problem with the treatment or distribution system. Whenever we detect coliform bacteria in any sample, we do follow-up testing to see if other bacteria of greater concern, such as fecal coliform or E. coli, are present. **We did not find any of these bacteria in our subsequent testing.** If we had, we would have notified you immediately.

What happened? What is being done? (Explain below)

We anticipate resolving the problem within _____ (estimated time frame).

For more information, please contact _____ (name of contact) at _____ (phone number) or _____ (mailing address).

Please share this information with all other people drinking this water, especially those who may not have received this notice directly (e.g., people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

This notice is being sent you by _____ (system name)

Public Water Supply ID# _____ Date Distributed _____

Instructions for Issuance of Public Notice

These instructions apply to the public notice on page 26 of this guide titled "IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER—(*system name*) HAS EXCEEDED THE MAXIMUM CONTAMINANT LEVEL FOR TOTAL COLIFORM BACTERIA." This public notice should be used when you have exceeded the maximum contaminant level for **total coliform bacteria**.

1. **Complete and issue the public notice** on the reverse side of this page ***as soon as possible, but not later than twenty-four (24) hours after the violation*** by:
   a) ***Hand delivering*** it to all regular customers of the water system (i.e., employees, students, staff, etc.), or
   b) ***Posting*** it in conspicuous places within the area served by the system.
2. **Notice by hand delivery must be repeated *at least every three (3) months for as long as the violation exists.* Posting must continue *for as long as the violation exists.***
3. **A copy of this public notification as posted or hand delivered and a copy of the completed Certification Form for Public Notice (below) must be mailed within ten (10) days of posting or hand delivery to:** IDEM - Office of Water Quality, Drinking Water Branch - Compliance Section, Attn.: Transient Water Systems, P.O. Box 7148, Indianapolis, IN 46207-7148. Or, you may fax it to (317) 308-3339 or (317) 308-3340.

Note: *If your system chooses to draft its own public notification, the minimum required language is presented on the reverse side of this page. You are encouraged to include in your public notification any additional information regarding the circumstances of the violation and any corrective measures undertaken.*

Certification for Public Notice

Public Water System Name: _____

Public Water System Identification Number: _____

For Violation: _____
(describe violation or situation)

Occurring on: _____
(date)

The public water system indicated above hereby affirms that public notice has been provided to consumers in accordance with the delivery, content, and format requirements and deadlines in 327 IAC 8-2.1-7.

- Consultation with primacy agency (if required) on _____ (date).
- Notice distributed by _____ (method) on _____ (date).
- Notice distributed by (if needed) _____ (method) on _____ (date).
- Content – required elements.

_____ _____

Signature of owner or operator Date

DRINKING WATER WARNING

_____
(system name)

HAS EXCEEDED THE MAXIMUM CONTAMINANT LEVEL FOR FECAL COLIFORM (E. COLI). WATER IS CONTAMINATED WITH FECAL COLIFORM (E. COLI). BOIL YOUR WATER BEFORE USING.

Fecal coliform (E. coli) bacteria were found in the water supply on _____ (date) . These bacteria can make you sick, and are a particular concern for people with weakened immune systems.

What should I do?

- **Do not drink the water without boiling it first.** Bring all water to a boil, let it boil for one minute, and let it cool before using, or use bottled water. Boiled or bottled water should be used for drinking, making ice, brushing teeth, washing dishes, and food preparation until further notice. Boiling kills bacteria and other organisms in the water.
- *Fecal coliform/E. coli are bacteria whose presence indicates that the water maybe contaminated with human or animal waste. Microbes in these wastes can cause diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a special health risk for infants, young children, and people with severely compromised immune systems.*
- The symptoms above are not caused by organisms in drinking water. If you experience any of these symptoms and they persist, you may want to seek medical advice. People at increased risk should seek advice about drinking water from their health care providers.

What happened? What is being done? (Explain below)

We will inform you when tests show no bacteria and you no longer need to boil your water. We anticipate resolving the problem within _____ (estimated time frame).

For more information, please contact _____ (name of contact) at _____ (phone number) or _____ (mailing address).

General guidelines on ways to lessen the risk of infection by microbes are available from the U.S. Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-246-4791.

Please share this information with all other people drinking this water, especially those who may not have received this notice directly (e.g., people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

This notice is being sent you by _____ (system name)

Public Water Supply ID# _____ Date Distributed _____

Instructions for Issuance of Public Notice

These instructions apply to the public notice on page 28 of this guide titled "DRINKING WATER WARNING—(*system name*) EXCEEDED THE MAXIMUM CONTAMINANT LEVEL FOR FECAL COLIFORM (E. COLI). WATER IS CONTAMINATED WITH FECAL COLIFORM (E. COLI). BOIL YOUR WATER BEFORE USING." This public notice should be used when you have exceeded the maximum contaminant level for **fecal coliform (E. coli)**.

1. **Complete and issue the public notice** on the reverse side of this page ***as soon as possible, but not later than twenty-four (24) hours after the violation*** by:
   a) ***Hand delivering*** it to all regular customers of the water system (i.e., employees, students, staff, etc.), or
   b) ***Posting*** it in conspicuous places within the area served by the system.
2. **Notice by hand delivery must be repeated *at least every three (3) months for as long as the violation exists.* Posting must continue *for as long as the violation exists.***
3. **A copy of this public notification as posted or hand delivered and a copy of the completed Certification Form for Public Notice (below) must be mailed within ten (10) days of posting or hand delivery to:** IDEM - Office of Water Quality, Drinking Water Branch - Compliance Section, Attn.: Transient Water Systems, P.O. Box 7148, Indianapolis, IN 46207-7148. Or, you may fax it to (317) 308-3339 or (317) 308-3340.

Note: *If your system chooses to draft its own public notification, the minimum required language is presented on the reverse side of this page. You are encouraged to include in your public notification any additional information regarding the circumstances of the violation and any corrective measures undertaken.*

Certification for Public Notice

Public Water System Name: _____

Public Water System Identification Number: _____

For Violation: _____
(describe violation or situation)

Occurring on: _____
(date)

The public water system indicated above hereby affirms that public notice has been provided to consumers in accordance with the delivery, content, and format requirements and deadlines in 327 IAC 8-2.1-7.

- Consultation with primacy agency (if required) on _____ (date).
- Notice distributed by _____ (method) on _____ (date).
- Notice distributed by (if needed) _____ (method) on _____ (date).
- Content – required elements.

_____ _____

Signature of owner or operator Date

DRINKING WATER WARNING

_____
(system name)

HAS EXCEEDED THE MAXIMUM CONTAMINANT LEVEL FOR NITRATE. THE WATER HAS HIGH LEVELS OF NITRATE. DO NOT GIVE THE WATER TO INFANTS UNDER SIX (6) MONTHS OLD. DO NOT USE IT TO MAKE INFANT FORMULA.

Water sample results received _____ showed nitrate levels of
(date)

_____ . This is above the nitrate standard, or maximum
(level and unit)

contaminant level (MCL) of 10 mg/l. Nitrate in drinking water is a serious health concern for infants less than six months old.

What should I do?

- **DO NOT GIVE THE WATER TO INFANTS.** ***Infants below the age of six months who drink water containing nitrate in excess of the MCL could become seriously ill and, if untreated, may die.*** Symptoms include shortness of breath and blue baby syndrome. Blue baby syndrome is indicated by blueness of the skin. Symptoms in infants can develop rapidly, with health deteriorating over a period of days. If symptoms occur, seek medical attention immediately.
- Water, juice, and formula for children under six months of age should not be prepared with tap water. Bottled water or other water low in nitrates should be used for infants until further notice.
- **DO NOT BOIL THE WATER.** Boiling, freezing, filtering or letting water stand does not reduce the nitrate level. Excessive boiling can make the nitrates more concentrated, because nitrates remain behind when the water evaporates.
- Adults and children older than six months can drink the tap water (Nitrate is a concern for infants because they can't process nitrates in the same way adults can). However, if you are pregnant or have specific health concerns, you may wish to consult you doctor.

What happened? What is being done? (Explain below)

We anticipate resolving the problem within _____ . For more information,
(estimated time frame)

please contact _____ at _____ .
(name of contact) (phone number)

or _____ .
(mailing address)

More information is available from the U.S. Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-246-4791. Please share this information with all other people drinking this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

This notice is being sent you by _____
(system name)

Public Water Supply ID# Date Distributed

Instructions for Issuance of Public Notice

These instructions apply to the public notice on page 30 of this guide titled "DRINKING WATER WARNING—(*system name*) HAS HIGH LEVELS OF NITRATE. DO NOT GIVE THE WATER TO INFANTS UNDER SIX (6) MONTHS OLD. DO NOT USE IT TO MAKE INFANT FORMULA." This public notice should be used when you have exceeded the maximum contaminant level for nitrate.

1. **Complete and issue the public notice** on the reverse side of this page ***as soon as possible, but not later than twenty-four (24) hours after the violation*** by:
   a) ***Hand delivering*** it to all regular customers of the water system (i.e., employees, students, staff, etc.), or
   b) ***Posting*** it in conspicuous places within the area served by the system.
2. **Notice by hand delivery must be repeated *at least every three (3) months for as long as the violation exists.* Posting must continue *for as long as the violation exists.***
3. **A copy of this public notification as posted or hand delivered and a copy of the completed Certification Form for Public Notice (below) must be mailed within ten (10) days of posting or hand delivery to:** IDEM - Office of Water Quality, Drinking Water Branch - Compliance Section, Attn.: Transient Water Systems, P.O. Box 7148, Indianapolis, IN 46207-7148. Or, you may fax it to (317) 308-3339 or (317) 308-3340.

Note: *If your system chooses to draft its own public notification, the minimum required language is presented on the reverse side of this page. You are encouraged to include in your public notification any additional information regarding the circumstances of the violation and any corrective measures undertaken.*

Certification for Public Notice

Public Water System Name: _____

Public Water System Identification Number: _____

For Violation: _____
(describe violation or situation)

Occurring on: _____
(date)

The public water system indicated above hereby affirms that public notice has been provided to consumers in accordance with the delivery, content, and format requirements and deadlines in 327 IAC 8-2.1-7.

- Consultation with primacy agency (if required) on _____ (date).
- Notice distributed by _____ (method) on _____ (date).
- Notice distributed by (if needed) _____ (method) on _____ (date).
- Content – required elements.

_____ Signature of owner or operator

_____ Date

How to Get Other Available Information

This information can be obtained from IDEM's Drinking Water Branch. Call (800) 451-6027, press 0 and ask for extension 308-3280, or (317) 308-3280.

- **Chemistry Laboratories Certified in Indiana**
  This document lists chemistry laboratories certified by the Indiana State Department of Health to perform nitrate testing.

- **Microbiological Laboratories Certified in Indiana**
  This document lists Indiana State Department of Health-certified drinking water laboratories that do total coliform testing.

- **Drinking Water Branch Directory and Inspection Area Map**
  This directory to IDEM's Drinking Water Branch is arranged alphabetically by the branch's four sections—*Compliance*, *Field Inspection*, *Groundwater* and *Permits*. Programs and topics covered by each section are listed along with names, phone numbers and electronic mail addresses of staff who can assist you. A map outlining IDEM's field inspection staff and the areas they cover also is included.

- **Water Monitoring Requirements Poster**
  This poster summarizes water monitoring requirements for transient noncommunity water systems. IDEM recommends that you post it in a prominent location at your business or organization to serve as a reminder of your water monitoring responsibilities.

Visit IDEM's Drinking Water Branch on the Internet at **www.IN.gov/idem/water/dwb**.

PERMIT REQUIREMENTS

Construction Guidelines

The current laws regarding construction state that whenever facilities, equipment, or devices are added or modified, a construction permit is necessary before construction can begin. Facilities, equipment and devices include, but are not limited to:

- All drinking water wells (all new wells must have a well site survey completed).
- All chemical treatment equipment.
- All pumping equipment.
- All storage equipment.
- All water main extension.

Obtaining Permits

Contact the Indiana Department of Environmental Management, Drinking Water Branch, Permit Section at (317) 308-3300 to obtain a permit application.

To Obtain a Well Site Survey

Contact the Indiana Department of Environmental Management, Drinking Water Branch, Field Inspection Section at (317) 308-3366 to obtain a well site survey form.

Printed with soy-based ink on 50% recycled paper with 20% post-consumer waste.

4-02 dw\Water Monitoring Guide_2002.p65

To order, call IDEM's Drinking Water Branch at (800) 451-6027, press 0 and ask for extension 308-3280, or (317) 308-3280.